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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,434	09/25/2003	Suguru Takishima	P23960	4255
7055 7590 01/09/2007 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER PATEL, GAUTAM	
			ART UNIT	PAPER NUMBER
			2627	
SHORTENED STATUTORY PERIOD OF RESPONSE		NOTIFICATION DATE	DELIVERY MODE	
3 MONTHS		01/09/2007	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 01/09/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/669,434	TAKISHIMA, SUGURU	
	<b>Examiner</b>	<b>Art Unit</b>	
	Gautam R. Patel	2627	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 November 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **Response to Amendment**

1. This is in response to amendment filed on 11/21/06.
2. claims 1-20 remain for examination.
3. Applicant's arguments regarding rejection of claims 7-9 under 35 U.S.C. § 112 first & second paragraph and objection to claims 1-10 have been fully considered and rejection of claims 7-9 under 35 U.S.C. 112 first & second paragraphs and objection to claims 1-10 has been withdrawn.

### **OBJECTION TO SPECIFICATION**

4. The specification is objected for the following reasons.

On page 13 paragraph 44 class a first reflection prism as "135a". Also on the same page it calls The first reflection prism as "135c".

NOTE: All errors has not been checked. The Applicants cooperation is requested. This is assumed to be a typographical and error and for examination purposes it is assumed that the first reflection prism is indeed unit 135a and not 135c.

### **Claim Rejections - 35 U.S.C. § 102**

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6, 11-14 and 16 are rejected under 35 U.S.C. § 102(b) as being anticipated by Yokoyama et al., US. patent 5,161,040 (hereafter Yokoyama).

As to claim 1, Yokoyama discloses the invention as claimed, an optical disc drive, [see Figs. 9 & 11] including an optical head including a stationary portion and a movable portion and an aberration correcting lens, comprising:

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an optical head [fig. 11, unit 100] including a stationary portion [fig. 11, unit 104] and a movable portion [fig. 11, unit 102], said movable portion supporting an objective lens [fig. 11, unit 114] for converging a beam emitted from said stationary portion on an optical disc [fig. 11, unit 104], said movable portion moving radially across the optical disc [col. 9, line 39 to col. 10, line 27];

an aberration correcting lens [fig. 11, unit 116] mounted on said movable portion wherein said aberration correcting lens corrects aberration caused by said objective lens by moving in a direction substantially orthogonal to a movable direction of said movable portion in accordance with a variation of the aberration caused by said objective lens [col. 3, line 56 to col. 4, line 28; & col. 9, line 39 to col. 10, line 27].

6. The aforementioned claim 2, recites the following elements, inter alia, disclosed in Yokoyama:

said aberration correcting lens is mounted on said movable portion movably in a direction parallel to the optical disc [col. 10, lines 14-27].

7. The aforementioned claim 3, recites the following elements, inter alia, disclosed in Yokoyama:

said aberration correcting lens is mounted on said movable portion movably in a direction perpendicular to said optical disc [col. 10, lines 9-56]

NOTE: Claims 2 & 3 simply claiming a how a carriage [movable portion] works. Also the carriage has to move in both direction to be any practical use and it inherently does that.

8. The aforementioned claim 4, recites the following elements, inter alia, disclosed in Yokoyama:

a first deflector [fig. 11, unit 106] mounted on said movable portion, said first deflector deflecting the beam emitted from said stationary portion in the direction orthogonal to the movable direction of said movable portion, wherein said aberration correcting lens is disposed on an optical path of the beam deflected by said first deflector [col. 9, line 39 to col. 10, line 27].

9. The aforementioned claim 6, recites the following elements, inter alia, disclosed in Yokoyama:

said first deflecting member is a mirror [unit 106] [col. 9, line 39 to col. 10, line 27].

10. As to claim 11, it is rejected for the similar reasons set forth in the rejection of claim 1, above. As to added limitation of a carriage that moves across the disc; Yokoyama discloses unit 102 which function as carriage and moves across the disc.

11. As to claims 12-14, they are claims corresponding to claims 2-4 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 2-4 respectively, above.

12. As to claim 16, it is rejected for the similar reasons set forth in the rejection of claim 6, above.

### **Claim Rejections - 35 U.S.C. § 103**

13. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 7-10, 15, 17-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yokoyama as applied to claims 1-4, 6, 11-14 and 16 above.

As to claims 5, 8, 15 and 18, Yokoyama discloses all of the above elements including a mirror and a prism [fig. 9, unit 82] for deflecting the beams. Yokoyama does not specifically disclose that prism is being used as a first or second deflecting means.

However Yokoyama clearly discloses the use of prism as a deflecting means [fig. 9 and col. 8, lines 34-55].

Therefore, it would have been obvious to provide the system of Yokoyama with prism in place of mirror as first or second deflecting means as taught by Yokoyama in fig. 9. The

application or use of the prism as taught by Yokoyama would have been obvious, because the prism performs the same function in the same way as the mirror of Yokoyama's system, and is an equivalent element. One of ordinary skill in the art would have recognized that the prism was equivalent and an obvious alternative to mirror of system of Yokoyama.

14. As to claims 10 & 20, Yokoyama teaches all of the above components. Yokoyama does not teach use of a plate spring supporting the aberration lens. "Official Notice" is taken that both the concept and the advantages of providing a spring are well known and expected in the art. It would have been obvious to include a plate spring to support the lens in the system of Yokoyama as this spring are known to provide the support, reduce vibration and provide movement in desired direction. These concepts are well known in the art and do not constitute a patentably distinct limitation, per se [M.P.E.P. 2144.03].

15. Regarding claims 7 & 17, Yokoyama disclose a second deflecting member [fig. 11, unit 113]. Yokoyama does not specifically disclose that the second deflecting member is also located in the moving portion or that the aberration correcting lens is placed between first and second deflecting members. The limitations in claim 17 do not define a patentable distinct invention over that in Yokoyama since both the invention as a whole and Yokoyama are directed to moving the aberration correcting lens and objective lens together so as to correct the aberration.

The placement of the related parts in movable portion or in stationary portion presents no new or unexpected results, so long as the aberration is corrected and the assembly is moved in a successful way. If one can fit more parts in moving portion one does that, if less space in moving portion one places parts in a stationary portion. Therefore, to have placed both deflecting members in a same moving portion and placing lens between these two parts would have been routine experimentation and optimization in the absence of criticality.

Also it should also be pointed out that shifting location of the parts in the system is well known in the art. It would have been obvious to a person of ordinary skill at the time of the invention to have rearranged these two deflecting members and aberration lens in the system of Yokoyama because doing so would make the beams project in same direction as that of original projection of beams from the laser sources. As shown in "In re Japikse 86 USPQ 70 (CCPA

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1950)" these adjustments such as to **shift location of parts** generally not given patentable weight or would have been obvious improvements.

16. As to claims 9 and 19, it is rejected for the similar reasons set forth in the rejection of claim 6, above.

17. Applicant's arguments filed on 11/21/06 have been fully considered but they are not deemed to be persuasive for the following reasons.

In the REMARKS, the Applicant argues as follows:

A) That: "the examiner has not yet confirmed that drawings filed on September 25, 2003 are acceptable " [page 8, paragraph 3; REMARKS].

Office does not comment on drawings unless something is wrong with them. If the application is allowed at that time acceptance of drawings will be addressed.

B) That; "the examiner has indicated that he has not considered Japanese ..... No. 2003-45067 or ... 2003-150598..... The examiner does not indicate why these documents have not been considered." [page 8, paragraph 4; REMARKS].

The examiner cannot read Japanese. And simply looking at figures it was not clear what was the relevance. Simply indicating in IDS remarks how they are relevant does not make them fit fore consideration, because e it is still not clear what is in those documents, and if they indeed has some art that really reads on the claims. This was the reason they were not considered.

C) That: "Yokoyama et al. fails to disclose or suggest that the microfresnel lens 116 moves in a direction substantially orthogonal to a movable direction of the movable section 102. Yokoyama discloses that the movable section 102 moves in direction 109 transverse to a recording medium 119, as shown in figure 11, but Applicant respectfully submits that Yokoyama fails to disclose or suggest that the microfresnel lens 116 moves in a direction substantially orthogonal to direction 109." [page 12, paragraph 2; REMARKS].

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FIRST: The argument that moving section moves transverse to recording medium 119 is moot and irrelevant, since what is being CLAIMED is that aberration correcting lens moves orthogonal to movable section [102].

SECOND: And indeed direction F of movable section 102 is orthogonal to aberration correction lens. Section 102 moves in direction F and T [see fig. 11].

18. Applicant's amendment necessitated the new grounds of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

#### Contact information

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2600) where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, who can be reached on (571) 272-7023.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.



**GAUTAM R. PATEL**  
**PRIMARY PATENT EXAMINER**

Gautam R. Patel  
Primary Examiner  
Group Art Unit 2627

January 1, 2007